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EXAMINER	
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ART UNIT	**PAPER NUMBER**
3626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,035	DAHLIN ET AL.	
	Examiner	Art Unit	
	Luke Gilligan	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9,18,21-25,27 and 41-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9,18,21-25,27 and 41-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/26/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. In the amendment filed 7/16/07, the following has occurred: claims 1, 18, 27, 45, 49,50, and 56 have been amended and claims 57 and 58 have been added. Now, claims 1, 4-9, 18, 21-25, 27, and 41-58 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4-5, 8-9, 18, 21-22, 25, 27, 41-51, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Martin et al., U.S. Patent No. 6,484,144.

4. As per claim 1, Barry teaches a system to implement at least one medical diagnostic or treatment algorithm in a healthcare workflow, the system comprising: storage including a first medical diagnostic or treatment algorithm, a second diagnostic or treatment algorithm, and at least one patient medical record (see column 8, lines 12-26, i.e. plurality of treatment regimens); a user interface operable to display an interface associated with the healthcare workflow to a healthcare provider, wherein the healthcare workflow includes a set of interfaces for the healthcare provider to enter patient medical data into the at least one patient medical record during a patient encounter (see column 12, line 61 – column 13, line 9); and a disease management engine operable to select one medical diagnostic or treatment algorithm from the first medical diagnostic or treatment algorithm or the second medical diagnostic or treatment algorithm based on the at least one patient medical record and operable to modify the

healthcare workflow in accordance with the at least one medical diagnostic or treatment algorithm based on the patient medical data (see column 13, lines 25-30).

5. Although the treatment regimens of Barry are associated with a plurality of factors including cost (see column 13, lines 30-32), Barry does not explicitly teach that they are associated with a first third-party payer or a second third-party payer. Martin teaches a method of selecting a treatment plan for a patient that includes associating third-party payers with treatment plans for the purpose of selecting an appropriate treatment plan (see column 15, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such association for analysis into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of providing higher quality, more effective, and lower cost healthcare (see column 4, lines 50-53 of Martin).

6. As per claim 4, Barry teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a banner (see column 16, lines 13-20, the Examiner is interpreting the pop-up "Change Therapy Recommendation" message box to be a form of "banner" as recited).

7. As per claim 5, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a highlighted choice (see Figure 6B, it is noted that the adjusted dosage is indicated by a '+' sign).

8. As per claim 8, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the modification of the healthcare workflow is represented by the display of a recommended step therapy (see column 13, lines 25-30).

9. As per claim 9, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the user interface is a portable device (see column 9, lines 55-59, the Examiner interprets a computing device having minimal hardware to be portable).

10. As per claim 41, Barry in view of Martin teaches the system of claim 1 as described above. As described above, Barry does not explicitly teach a third party payer. Martin further teaches the first third-party payer is a prescription benefits management company, an HMO, or an insurance company (see column 15, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such a feature into the system of Barry for the reasons given above with respect to claim 1.

11. As per claim 42, Barry in view of Martin teaches the system of claim 1 as described above. As described above, although Martin teaches that third-party payers are insurance companies, neither Barry nor Martin explicitly teach that the second third-party payer is a government agency. The Examiner takes Official Notice that it was old and well known in the art at the time of the invention that there were government agencies that served as a third-party payer. For example, Medicare and Medicaid are old and well known examples of such government third-party payers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a third-party payer in the form of a government agency within the combined teachings of Barry and Martin. One of ordinary skill in the art would have been motivated to incorporate such an element for the purpose of providing more cost effective health care (see column 4, lines 50-53 of Martin).

12. As per claim 43, Barry in view of Martin teaches the system of claim 1 as described above. Barry further teaches the at least one medical diagnostic or treatment algorithm includes an element (see column 5, lines 10-25).

13. As per claim 44, Barry in view of Martin teaches the system of claim 43 as described above. Barry further teaches the element includes a task field, a condition field, and a content field (see column 5, line 26 – column 6, line 40 including the tables, note that numerous fields are included in the treatment regiment data).

14. As per claim 45, Barry in view of Martin teaches the system of claim 44 as described above. Barry further teaches the disease management engine is operable to modify, based on a content field, the healthcare workflow (see column 13, lines 25-30).

15. Claims 18 and 27 recite substantially similar limitations to those already addressed in claim 1 and, as such, are rejected for similar reasons as given above.

16. As per claim 46, Barry in view of Martin teaches the system of claim 18 as described above. Barry further teaches modifying the interface includes presenting an approval interface associated with approval of a procedure based on a care plan (see column 13, lines 25-30).

17. Claims 47-50 recite substantially similar additional limitations to those already addressed in claims 42-45 and, as such, are rejected for similar reasons as given above.

18. Claims 51 and 54-56 recite substantially similar limitations to those already addressed in claims 1, 18, and 27 (see page 12 of Applicant's remarks) and, as such, are rejected for similar reasons as given above.

19. Claims 21-22 and 25 recite substantially similar additional limitations to those already addressed in claims 4-5 and 8 and, as such, are rejected for similar reasons as given above.

20. Claims 6, 23, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Martin et al., U.S. Patent No. 6,484,144 and further in view of Iliff, U.S. Patent No. 6,206,829.

21. As per claim 6, Barry in view of Martin teaches the system of claim 1 as described above. Barry does not explicitly teach the modification of the healthcare workflow is represented by the display of a question. Iliff teaches a medical treatment advice system that includes displaying to a user a modification of a healthcare workflow represented by the display of a question (see column 79, lines 59-63 and Figure 33). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of aiding in selecting treatment regimens in which the information regarding the treatment options can be readily understood (see column 2, lines 33-45 of Barry) by presenting a user with additional questions as taught by Iliff.

22. Claims 23, 52, and 23 recite substantially similar additional limitations to those already addressed in claim 6 and, as such, is rejected for similar reasons as given above.

23. Claims 7 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Martin et al., U.S. Patent No. 6,484,144 and further in view of Schmidt et al., U.S. Patent No. 6,839,678.

24. As per claim 7, Barry in view of Martin teaches the system of claim 1 as described above. Although Barry does teach that the system may be used for clinical drug trial activities, the reference does not explicitly teach the modification of the healthcare workflow is represented by the display of a notification of a drug trial. Schmidt teaches automatically determining and notifying a patient of eligibility for medical studies by a central server (see column 2, lines 9-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art

would have been motivated to incorporate such a feature for the purpose supporting the clinical drug trial activities in Barry (see column 8, lines 1-5).

25. Claim 24 recites substantially similar additional limitations to those already addressed in claim 7 and, as such, is rejected for similar reasons as given above.

26. Claims 6, 23, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barry et al., U.S. Patent No. 6,188,988 in view of Martin et al., U.S. Patent No. 6,484,144 and further in view of Hildebrand et al., U.S. Patent No. 6,470,320.

27. As per claim 57, Barry in view of Martin teaches the system of claim 51 as described above. Barry does not explicitly teach the selecting includes automatically selecting one of the first or second disease management algorithms based at least in part on an insurance company associated with a patient, data associating the insurance company with the patient stored in the patient record. However Hildebrand teaches a disease management system that includes the feature of automatically selecting a disease management algorithm based at least in part on an insurance company associated with a patient, data associating the insurance company with the patient stored in a patient record (see column 8, lines 45-61, note that cost data includes costing parameters from an insurance company associated with the patient, see column 5, lines 34-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of reducing expenses incurred by a disease management system (see column 2, lines 25-29).

28. As per claim 58, Barry in view of Martin teaches the system of claim 51 as described above. Barry does not explicitly teach the selecting includes automatically selecting one of the first or second disease management algorithms based at least in part on an insurance company

associated with a patient, data associating the insurance company with the patient stored in the patient record. However Hildebrand teaches a disease management system that includes the feature of automatically selecting a disease management algorithm based at least in part on an insurance company associated with a patient and a medical condition associated the patient, data associating the insurance company and the medical condition with the patient stored in a patient record (see column 8, lines 45-61, note that cost data includes costing parameters from an insurance company associated with the patient, see column 5, lines 34-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Barry. One of ordinary skill in the art would have been motivated to incorporate such a feature for the purpose of (see column 2, lines 25-29).

Response to Arguments

29. In the remarks filed 7/16/07, Applicant argues in substance that (1) neither Barry nor Martin teaches associating separate disease management algorithms with different third-party payers; (2) Barry fails to teach selecting one of the first or second medical diagnostic or treatment algorithms; (3) Barry in view of Martin fail to teach certain dependent limitations.

30. In response to Applicant's argument (1), a noted in the arguments, the Examiner relied upon the teachings of Martin for this limitation. However the Examiner respectfully maintains that Martin teaches associating disease management algorithms with third-party payers. Martin teaches comparing a given treatment plan to insurance coverage (i.e. third party payer) (see column 15, line 55 – column 16, line 44). Such a comparison is a form of association. Therefore, it is respectfully maintained that such a limitation, as recited in the claims, is taught by Martin.

31. In response to Applicant's argument (2), it is respectfully submitted that the Examiner is interpreting the "inference engine" of Barry to be a form of "disease management engine" as recited in the claims. At column 13, lines 25-39, Barry teaches suggesting a treatment regimen by the inference engine. The suggested regimen is clearly selected form multiple therapies because Barry indicates that if more than one drug therapy is presented, they can be ranked. Therefore, the Examiner maintains that this limitation is taught by Barry.

32. In response to Applicant's argument (3), the Examiner respectfully maintains that the cited portions of the references teach each of the dependent limitations given the broadest reasonable interpretation to one of ordinary skill in the art at the time of the invention. Accordingly, the Examiner does not find Applicant's arguments to be persuasive.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

34. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Gilligan whose telephone number is (571) 272-6770. The examiner can normally be reached on Monday-Friday 8am-5:30pm.

36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/28/07

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